

REMARKS

This Amendment is submitted in response to the Office Action dated July 30, 2003, having a shortened statutory period set to expire October 30, 2003.

In paragraph 4 of the present Office Action, the Examiner has rejected Claims 1-12 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,202,171 to *Townsley (Townsley)*. Those rejections are respectfully traversed in view of the amendments and discussion made herein, and favorable reconsideration of the claims is requested.

With respect to Claims 1-7, Applicant respectfully submits that *Townsley* fails to teach or show several aspects of Applicant's invention, which Applicant recites in the amended claims. First, *Townsley* does not teach or show, and actually teaches away from, Applicant's claimed feature of "a detector, directly coupled to the power output of the external power receiving unit, to measure the voltage supplied by the external power receiving unit and to detect a loss of the electric power supplied from the external power source to the external power receiving unit, wherein said detector detects the loss of the electric power supplied from the external power source to the external power receiving unit by measuring the voltage level supplied by the power output and comparing the voltage level to a fixed reference voltage, regardless of whether power is being supplied by the one or more batteries." Second, *Townsley* does not teach or show, and actually teaches away from, "an integrated charging device, coupled to the power output and to the one or more battery supply circuits, wherein the charging device is capable of selectively trickle charging or rapid charging the one or more batteries with the electric power supplied from the power output."

First, with respect to Applicant's claimed detector, the Examiner cites Col. 6, lines 36-47 of *Townsley*. The cited passage discloses:

When the computer is not plugged into an AC line voltage, the microcontroller 110 makes a determination as to which battery should be operating the system according to the discharging rules under which it operates. If it determines that battery 102 should be utilized, then the microcontroller provides PGE_LOAD.sub.-- 1 signal to the PAL 115 which responsively sends the signal LOAD.sub.-- 1 to the LOAD.sub.-- 1 FET 119.

Similarly, if the microcontroller 110 determines that the battery 103 should be used to power the system, then the microcontroller provides a **PGE_LOAD.sub.-- 2** control to the PAL 115 which in turn propagates the **LOAD.sub.-- 2** signal to the **LOAD.sub.-- 2** FET 120.

The cited passage in *Townsley* does not mention any detector functionality. Further, when *Townsley* discloses a detector, *Townsley*'s detector reads the voltage level at a single point, which receives voltage contributions from *both of the battery and the AC adaptor* (Figure 3, Element 125). *Townsley*'s detector is able to detect which of the battery and AC adaptor has failed *only if* *Townsley*'s PAL correctly adjusts a variable threshold voltage supplied to *Townsley*'s comparator, but *Townsley*'s voltage detector cannot independently detect a loss of external power, because it does not sample for the presence of external power at a point that does not receive battery power. As disclosed in Figure 4, *Townsley* places his detector's comparator 125 downstream from both the batteries and the main AC power adaptor, where it reads the **V_18_Main**, and compares that signal to the **Fault_LVL** signal. This means that the voltage detector's comparator 125, while capable of detecting loss of power from both of the batteries and the AC power adaptor at **V_18_Main**, cannot isolate the **V_Main** signal from the AC adaptor and determine, based on the **V_Main** signal, whether the AC adaptor is providing appropriate voltage.

This design teaches away from applicant's solution of a "a detector, directly coupled to the power output of the external power receiving unit, to measure the voltage supplied by the external power receiving unit and to detect a loss of the electric power supplied from the external power source to the external power receiving unit, wherein said detector detects the loss of the electric power supplied from the external power source to the external power receiving unit by measuring the voltage level supplied by the power output and comparing the voltage level to a fixed reference voltage, regardless of whether power is being supplied by the one or more batteries." Applicant's detector (Figure 3, Element 110), is coupled to the external power receiving unit, so that it can isolate the voltage from the AC adaptor and detect a loss of power from the AC adaptor, even when batteries are functioning normally. Applicant's design, because it detects the presence of AC power directly, rather than by using a PAL to set a variable threshold, is more reliable than *Townsley*'s design.

Second, with respect Applicant's charging device, *Townsley* does not explicitly disclose a charging circuit, leaving the Applicant or one skilled in the art to conclude that *Townsley*'s charging is performed by directly applying the V_Batt voltage from the AC adaptor 101 to the batteries 102 & 103, (*Townsley*, Figure 4). This teaches away from Applicant's solution of "an integrated charging device, coupled to the power output and to the one or more battery supply circuits" (Figure 3, Element 144).

The foregoing argument made with respect to Claim 1 is also believed to patentably distinguish similar Claims 13 and 20, and their respective dependent claims.

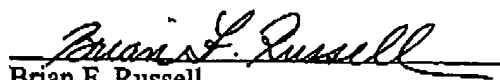
Additionally, with regard to dependent Claims 2, 14 and 21, *Townsley* does not teach or show, and actually teaches away from, "a rechargeable temporary power supply device including a capacitor." This feature is not shown in *Townsley*, which uses a battery to provide temporary power (Figure 3, Element 104). Applicant's invention implements this feature in one embodiment through the use of a capacitor (Figure 3, Element C1).

Further, with regard to dependent Claims 6, 18 and 25, *Townsley* does not teach or show "a switching unit coupled to the power output and to one or more of the battery power supply circuits, wherein the switching unit prevents a short circuit of the integrated charging device while the integrated charging device is charging one or more of the batteries." This feature is not shown in *Townsley*, which, as stated above, does not employ "an integrated charging device, coupled to the power output," and therefore does not address the problem of a short circuit in such a charging device.

It is respectfully submitted that the claims are in condition for allowance and favorable action is requested. No extension of time is believed to be required. However, in the event that an extension of time is required, please charge that extension fee and any other required fees to IBM Corporation's Deposit Account Number 50-0563.

Applicant respectfully requests the Examiner contact the undersigned attorney of record at (512) 472-7800 if such would further or expedite the prosecution of the present Application.

Respectfully submitted,


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